Check List **2**(1)
ISSN: 1809-127X

NOTES ON GEOGRAPHIC DISTRIBUTION

Aves, *Podilymbus podiceps*, *Ardea alba*, *Egretta thula*, *Nycticorax nycticorax*, *Ixobrychus exilis*, *Porzana carolina*, *Porphyrula martinica*, *Gallinula chloropus*, *Phalaropus tricolor*, *Vanellus resplendens*: Distribution extensions, filling gaps, historical occurrence

Diego F. Cisneros-Heredia

College of Biological & Environmental Sciences, Universidad San Francisco de Quito, Casilla Postal 17-12-841, Quito, Ecuador; and Aves&Conservación (Corporación Ornitológica del Ecuador).
E-mail: diegofrancisco_cisneros@yahoo.com

The development of human civilization is historically attached to water access. Patterns of human land use are strongly associated with wetlands, and areas closer to aquatic ecosystems are usually more linked with humans than areas further away (Walsh et al. 2003) (e.g., urban centers in Neotropical countries built around wetlands: Mexico D.F., Quito, Bogotá). This relationship is severely affecting wetlands with agro-industrial and domestic pollution, elimination of shore vegetation, accelerated eutrification, and desiccation. Birds adapted to live on wetlands are particularly threatened around the world. Wetland birds are usually subjected to heavy hunting pressures (e.g., ducks, herons) which combined with pollution and habitat modifications lead them to local and global extinction. Therefore, waterbird conservation strategies are urgently required especially in developing countries. In order to develop successful and real strategies, it is needed accurate information about the diversity and distribution of waterbirds. Herein new information on the distribution of ten waterbird taxa from ten localities in Ecuador (Fig. 1) is presented.

PODICIPEDIDAE
PIED-BILLED GREBE *Podilymbus podiceps*
This grebe is considered common in the lowlands of western Ecuador but very local on highland lakes of northern and central Ecuador. It has been recorded between 2,100 to 3,200 m at the Laguna de Yaguarcocha, Lago de San Pablo (province of Imbabura), and Laguna de Yambo (province of Tungurahua); with just one record from the southern Ecuadorian highlands at El Cajas National Park (province of Azuay) (Fjeldsa & Krabbe 1990, Ridgely & Greenfield 2001).

Figure 1. Map of Ecuador showing the locations mentioned in the text. 1 = Yaguarcocha, 2 = Cuicocha, 3 = San Vicente de Andoas, 4 = La Merced de Nono, 5 = Quito and surroundings, 6 = Laguna de Papallacta, 7 = Pacoa-Ecuasal, 8 = Colta, 9 = La Toreadora, 10 = Cuenca and surroundings (± 20 km).

At least six adults *Podilymbus podiceps* were observed at the Laguna de Cuicocha (00°18'N, 78°22'W; 3,100 m), province of Imbabura, on 17 November 2001, including one pair with downy chicks. This locality was not previously cited for the species or plotted in the distribution map by Ridgely & Greenfield (2001). On 26 September 1995, an adult (breeding plumage) *Podilymbus podiceps* was found on a garden at El Batan neighborhood, Quito (in an area where the Carolina marshes used to be) (c. 00º10'S, 78º28'W, 2,800 m), province of Pichincha. It was relocated to a reservoir near Cumbayá. Previous records of *Podilymbus podiceps* in the area of Quito used to come from the (now disappeared) Carolina marshes (Ortíz Crespo 1975), and Ridgely & Greenfield (2001) recorded this species as historical in the area of Quito. On 24 February

NOTES ON GEOGRAPHIC DISTRIBUTION

1995, c. 10 adult *Podilymbus podiceps* were observed at the Laguna de Colta (01°44'S, 78°45'W; 3,300 m), province of Chimborazo, swimming on the southern area of the lagoon in non-breeding plumage. Laguna de Colta was not cited in the text or plotted in the distribution map of *P. podiceps* by Ridgely & Greenfield (2001).

On 15 August 1999, one individual of *Podilymbus podiceps* was observed at Laguna La Toreadora, El Cajas National Park (c. 02°35'S, 79°15'W), province of Azuay; and on 18 August 1999, two *P. podiceps* were on a water reservoir c. 10 km from Cuenca, on the Cuenca – Ingapirca Road (c. 02°51'S, 78°54'W), province of Azuay. At both sites, individuals were on adult breeding plumage, swimming c. 10-20 m from shore. These records at Azuay correspond to the second and third report from southern Ecuadorian highlands.

ARDEIDAE
GREAT EGRET *Ardea alba*
This egret occurs both in fresh and salt water in lowlands, been an occasional wanderer in small numbers to lakes in the interandean valleys up to 2,800 m especially in northern Ecuador (Ridgely & Greenfield 2001) (e.g., occasional at the artificial lagoon in the campus of the Universidad San Francisco de Quito, Cumbaya, pers. obs., July 2003). It appears to have no published records from the southern Ecuadorian highlands (Fjeldsa & Krabbe 1990, Ridgely & Greenfield 2001). *Ardea alba* was reported as regular at 3,000-4,100 m in Ecuador by Fjeldsa & Krabbe (1990), but Ridgely & Greenfield (2001) reported an old record at the Colta Lagoon (3,500 m) as the highest altitude. Henry (2005) presented records of *A. alba* that suggested the regular occurrence of this species in the Colta Lagoon. The distribution map of *Ardea alba* in Ridgely and Greenfield (2001) does not include the tropical and subtropical foothills of western Pichincha in the range of the species.

On 29 December 2002, a group of ten *Ardea alba* (and one *Egretta thula* see below) was observed foraging on small shallow pools in cattle pastures, c. 14 Km from Cuenca, on the Cuenca – Oña – Loja road, province of Azuay. Four days after first observation, at least seven *A. alba* were still present there (Fig. 2). These records confirm the presence of *A. alba* in the southern highlands of Ecuador. On 17 December 1998, *Ardea alba* was registered on the Laguna de Papallacta (78º09' W 00º22' S, ca. 3,650 m), province of Napo. This record seems to be one of the highest records of this species in Ecuador. Local indigenous people recognize easily this species, which suggest that this species is not so rare in the area. Henry (2005) commented on another record of *A. alba* from the Laguna de Papallacta on 02 December 2000 by N. Athanas. Wandering individuals of *Ardea alba* (most in flight) have been observed on a regular basis near San Vicente de Andoas (ca. 00°05'N, 78°59', ca. 700 m a.s.l.), a town on the Calacali – Nanegalito – La Independencia road (Km 109), Pichincha province. These records confirm the presence of *A. alba* in the tropical and subtropical foothills of western Pichincha province.

Figure 2. *Ardea alba*, Great Egret, c. 14 Km from Cuenca, on the Cuenca, Oña, Loja road, province of Azuay, 29 December 2002.

Check List **2**(1)
ISSN: 1809-127X

NOTES ON GEOGRAPHIC DISTRIBUTION

SNOWY EGRET *Egretta thula*
The Snowy Egret *Egretta thula* is widespread near both in fresh and salt water in lowlands, but occurs in small number around lakes in the northern highlands of Ecuador, with an altitudinal range up to 2,600 m, with no records from southern Ecuadorian Andes (Fjeldsa & Krabbe 1990, Ridgely & Greenfield 2001). The tropical and subtropical foothills of western Pichincha were not included in the range of this egret (Ridgely & Greenfield 2001).

On 29 December 2002, one *Egretta thula* (and several *Ardea alba*, see above) was observed foraging on small shallow pools in cattle pastures, c. 14 Km from Cuenca, on the Cuenca – Oña – Loja road, province of Azuay. This record confirms the presence of *E. thula* in the southern highlands of Ecuador. Wandering individuals of *Egretta thula* (most of them in flight) have been observed on a regular basis near San Vicente de Andoas, Pichincha province. One *E. thula* was recorded foraging in a small pool in cattle pastures on July 1997 near San Vicente de Andoas, and another individual was on a puddle of a dirty road on June 1999 near Pedro Vicente Maldonado, a town 8 km W of San Vicente de Andoas. These records confirm the presence of *E. thula* in the tropical and subtropical foothills of western Pichincha province. Between 29 August - 2 September 2000, an adult vagrant *Egretta thula* was present at the artificial pool in the campus of the Universidad San Francisco de Quito, at Cumbaya (ca. 78º26'W, 00º11'S, 2390 m), Pichincha province. On 24 February 1995, c. 70 *E. thula* were observed at the Laguna de Colta (01º44'S, 78º45'W, 3,300 m), province of Chimborazo. These records together with those presented by Henry (2005) confirm the presence of *E. thula* in central highlands, and its wandering habits into some interandean valleys.

BLACK-CROWNED NIGHT-HERON
Nycticorax nycticorax
This night-heron occurs in mangroves and on tidal flats, freshwater marshes, and around forest margins of lakes and ponds in the lowlands of western and eastern Ecuador and in the northern highlands of Ecuador, with one record from southern Ecuador; up to 2,800 to 3,000 m (Ridgely & Greenfield 2001). Numbers from highland locations are much reduced because of extensive disturbance (Ridgely & Greenfield 2001). On 24 February 1995, one individual was observed in the reed-beds of Laguna de Colta (01º44'S, 78º45'W, 3,300 m), province of Chimborazo. This is the first report of the species from this area, increasing its distributional ranges towards central Andean Ecuador and its altitudinal range up to 3,280 m. On 19 March 1995, five individuals were present at Laguna de Yaguarcocha, province of Imbabura (00º23'N, 78º05'W, 2,300 m), confirming that the species is still present in that lagoon.

LEAST BITTERN *Ixobrychus exilis*
The subspecific status of populations of this species in Ecuador is poorly understood (Ridgely & Greenfield 2001). Moreover, the real provenance of the two specimens obtained within the city of Quito is still unknown (Ridgely & Greenfield 2001). A third juvenile individual was found on 06 May 1995, on a garden within the city limits of Quito (c. 00º13'S, 78º30'W, 2,800 m), province of Pichincha. It was released at some wetland near Quinindé, province of Esmeraldas (J.M. Touzet pers. comm). The record of another *Ixobrynchus* juvenile from the Quito area seems to support Ridgely & Greenfield's (2001) assumption that these juveniles are dispersing from some nearby breeding population.

RALLIDAE
SORA CRAKE *Porzana carolina*
This species is a boreal winter visitant with records in a few lakes in the highlands of northern Ecuador, south to Chimborazo, with one record from as far south as Azuay; up to about 2,800 m (Ridgely & Greenfield 2001). On 24 February 1995, one individual was observed at Laguna de Colta, province of Chimborazo (01º44'S, 78º45'W, 3,300 m); foraging in the reed-beds. Two individuals of the Ecuadorian Rail *Rallus aequatorialis* were also observed in the same reed-beds. This is the first record in this lagoon and extends the altitunidal range of the species in Ecuador up to 3,280 m.

PURPLE GALLINULE *Porphyrula martinica*
This species was classified as casual on tablelands near Quito by Fjeldsa & Krabbe (1990); and Ridgely & Greenfield (2001) indicated that "a few

NOTES ON GEOGRAPHIC DISTRIBUTION

have been seen or picked up in weakened conditions in the Quito area". Most records of the species in the highlands are from the early 20th-century, and recent records come mainly from the Quito area and from Laguna de Yaguarcocha and Laguna de Yambo up to about 2,800 m (Ridgely & Greenfield 2001). Between 1993 and 1996, twenty-three individuals of this species were delivered to the "Vivarium de Quito" (Fundación Herpetológica Orcés) or to Aves&Conservación (Corporación Ornitológica del Ecuador), as follows: 3 individuals in 1993, 4 in 1994, 3 in 1995 and 13 in 1996. Seventy-four percent of the gallinules were delivered in the months of January and February, with single records in the months of May 1993, May 1996, July 1995, September 1996, November 1996, and December 1993. All came from the Quito Valley, and at least 80% were found on gardens in the northern neighborhoods of Quito, province of Pichincha (c. 00º13'S, 78º30'W, 2,800 m) (former location of La Carolina marshes). Four individuals were juveniles and the rest adults in full plumages. Nine gallinules were weak and died in a short period (including all the juveniles), and were deposited at the Department of Biology - Escuela Politecnica Nacional and at the Museo Ecuatoriano de Ciencia Naturales. Fourteen adult gallinules were in good conditions and were either repatriated in nearby wetlands or delivered to the Schlenker's "Centro de Rescate de Fauna" at Tumbaco, province of Pichincha. The records of *Porphyrula martinica* from Quito are on a yearly-base, indicating that the species is probably regular in the area and, annually, dozens of individuals could arrive to the zone. On 24 February 1995, one individual was observed at Laguna de Colta, province of Chimborazo (01º44'S, 78º45'W, 3,300 m) while foraging in the reed-beds. This record extends the altitudinal range of the species up to 3,280 m.

COMMON GALLINULE *Gallinula chloropus*
This species have been reported locally on certain lakes in the highlands of northern Ecuador between 2,200 and 2,800 m, mainly in the province of Imbabura but at least formally south to Chimborazo (Ridgely & Greenfield 2001).

One individual was observed foraging amidst the reed-beds of Laguna Encantada, c. 20 km NW from Cuenca, province of Azuay (c. 02º49'S, 79º09'W, c. 3,200 m), on August 1999. This record extends the distribution of the species to southern Andean Ecuador and its altitudinal range up to c. 3,200 m.

SCOLOPACIDAE
WILSON'S PHALAROPE *Phalaropus tricolor*
In August 1995, about 25,000 *Phalaropus tricolor* were estimated (by photographic count) to be present at the salt evaporation ponds in the Pacoa wetlands (02º05'S, 80º44'W, 0 m), province of Guayas. Ridgely & Greenfield (2001) reported a similar number in September 1992 at the Ecuasal lagoons, but stated that in subsequent years the number was smaller "only a few hundred to several thousand". This record supports Ridgely &Greenfield's (2001) statement that the numbers seem to vary on a big proportion from year to year. Twelve Chilean Flamingos *Phoenicopterus chilensis* were also present at the salt evaporation ponds. Ridgely & Greenfield (2001) reported that *P. tricolor* occurs in small numbers on lakes in the highlands. Almost 300 *P. tricolor* were observed swimming at Laguna de Yambo (01º05'S, 78º35'W, 2,560 m), province of Tungurahua, on February 1995; and c. 10 individuals were observed swimming at Lago San Pablo (00º13'N, 78º12'W, 2,570 m), province of Imbabura, on February 1996. These records and those presented by Freile (2004) confirm its presence in various Andean wetlands, even in high numbers.

CHARADRIIDAE
ANDEAN LAPWING *Vanellus resplendens*
This species is known to inhabit paramo and open areas and pastures in the Andes from Carchi to Azuay, mostly from 3,500 to 4,400 m, but in small numbers occasionally down to 2900 m.

On December 2002 (while participating on the 2002 Christmas Bird Count, Mindo Circle), an adult *Vanellus resplendens* was observed foraging on a cattle pasture next to the road between La Merced de Nono and the main Quito-Calacali-Nanegalito road (c. 00º02'S, 78º33'W, 2,750), province of Pichincha. This record extends its altitudinal range down to 2750 m.

Several observations herein reported are among first regional records, increasing the distributional

and altitudinal ranges of numerous species. The presences of these species at some wetlands where they were previously unknown (especially central and southern highland wetlands) indicate that various waterbird species are probably more widespread than previously thought, and the inventorying of additional wetlands in central and southern Ecuador will probably register them. Information presented here is also an urgent call for the establishment of permanent monitoring activities of bird populations from the wetlands of Ecuador. Although some wetlands (e.g., those in Imbabura and Cotopaxi) are rather well known, we meagerly understand the population ecology of their birds or the effect of anthropogenic activities on their conservation. Even some unknown populations could occur in wetlands conceived as well-known (eg. *Ixobrychus*). Wetlands are providers of countless services to humans, from water supply to food; however we do not know them and our ignorance is risking their conservation. Wetlands in central and southern Ecuador are not well known at all, their alpha-diversity is poorly evaluated and those reports currently viewed as casual or erratic could in fact reflect our limited information rather than the true status of the species in the areas.

Acknowledgments

I am extremely grateful to María Elena & Laura Heredia for field companionship and moral, financial, and logistic support; and to Lani Miller for her constant support during several fieldtrips and at the Christmas Bird Counts. I appreciate the support of the "2001 Protected Areas" group of the College of Biological and Environmental Sciences, Universidad San Francisco de Quito, especially Dr. Gunther Reck. The staffs of the Cotacachi-Cayapas Ecological Reserve, and El Cajas National Park were very helpful. I thank Katty Aldáz, Myriam Burneo, Freddy Cáceres, Ana Gabela, Ruth Garcés, Gunther Reck, and Beatriz Trujillo, for providing information and field companionship at Colta, Yaguarcocha, San Pablo, and Ecuasal. Aves&Conservación (Corporación Ornitológica del Ecuador) and Universidad San Francisco de Quito provided institutional support.

Literature cited

Fjeldså, J. and N. Krabbe. 1990. *Birds of the high Andes*. Copenhagen. Zool. Mus., University of Copenhagen and Svendborg, Apollo Books. 876 p.

Hilty, S. L. and W. L. Brown. 1986. *A guide to the birds of Colombia*. Princeton. Princeton University Press. 836 p.

Ortiz Crespo, F. I. 1975. *Lista de las aves más comunes de Quito y sus alrededores / Check list of the most common birds of Quito and its surroundings*. Quito. Centro de Publicaciones, Pont. Universidad Católica del Ecuador. 8 pp.

Ridgely, R. S. and P. J. Greenfield. 2001. *The Birds of Ecuador*, Vol. 1. Ithaca. Cornell University Press. 848 p.

Walsh, S. E., P. A. Soranno and D. T. Rutledge. 2003. Lakes, wetlands, and streams as predictors of land use/cover distribution. *Environmental Management* 31(2): 198-214.

Received November 2005
Accepted March 2006
Published April 2006